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EXAMINER

NILANONT, YOUAPORN

ART UNIT

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2446

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/536,945	Applicant(s) ISHIDA ET AL.	
	Examiner YOUAPORN NILANONT	Art Unit 2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-8 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-8 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3-2-2009</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims:

Claims 6-8 and 11-15 are pending in this Office Action.

Claims 6, 8 and 11-15 are amended.

Claims 1-5 and 9-10 are cancelled.

The objections to the specification, drawings, claims 9-10 and the rejection under 35 USC 112 have been withdrawn in response to the applicant's amendments.

Information Disclosure Statement

The IDS filed on 03/02/2009 has been considered.

Response to Arguments

1. Applicant's arguments with respect to claims 6-8 and 11-15 have been considered but are moot in view of the new ground(s) of rejection. The reasons set forth below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6, 8, 11-12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Saito et al. (US 6,523,696).

4. **Regarding claim 6**, Saito discloses a network-enabled home appliance (Saito, figure 7 "AV Connection Device 205", column 19 lines 6-10 "are the so called IP terminals", thus network-enabled) that is remotely controllable from a terminal connected to an Internet via a server located on the Internet (Saito, figure 7 "PC 206", "AV Connection Device 204", "Public Network 202" and "AV Connection Device 205", column 20 lines 37-41 "has a function to set this AV connection device as a proxy server of services") comprising:

a control section configured to receive a packet from said server located on the Internet, the packet including a predetermined command, and to control the network-enabled home appliance based on the command (Saito, figure 8, column 20 lines 37-61 "function to notify access requests for these advertised terminals/services to the 1349/IP command conversion function 229...upon receiving these access requests from the public network side (IP side in general)", "229 is a function for converting the control commands" and "228 is processing function of the IEEE 1394 terminal control");

a server address storage section for storing a global address of said server located on the Internet (Saito, figure 8 "1394/IP Service Location Processing Function 226", column 5 lines 54-67 "contain an address", "acting on an object referred through the hyperlink");

a tunneling establishing section for establishing a tunneling connection between the network-enabled home appliance and the server based on the global address of the server (Saito, figure 8 "IP Processing Function 224", figure 49); and

a packet processing device for capsulating/decapsulating packets, the packets communicated with the server through the tunneling connection (Saito, figure 8 "1394/IP Command Conversion Function 229"), and routing the packets to the control section or the server (Saito, figure 8 "1394 I/F 221", "Datalink Switch 222" and "Public Network I/F 223", column 19 lines 50-67, figures 48-49).

5. **Regarding claim 8**, Saito discloses a server used on an Internet connection system which comprises

a client device (Saito, figure 7 "PC 206", "Digital TV 207", "1st AV Connection Device 204"),

a relay device installed in said client device (Saito, figure 7 "first AV Connection Device 204", column 31 lines 32-45 "functions to be carried out by the AV connection device...may be provided in the PC 206"),

and the server, the server being connected to Internet and also to the client device through the Internet and the relay device (Saito, figure 7 "2nd AV Connection Device 205" and "Public Network 202", figure 43 shows only one AV Connection Device, column 42 lines 16-21, column 20 lines 34-39), comprising:

a tunneling establishing section for establishing a tunneling connection between the relay device and the server (Saito, figure 44, "IP Processing Unit 2202, column 42 lines 45-48 and 56-61);

a client device management device for managing the client device in association with the relay device or the tunneling connection (Saito, figure 44 "NAT Processing Unit 2206", column 42 lines 62-67);

a routing device for routing a connection, the connection from the Internet to the client device, through the tunneling connection to the relay device which is connected to the client device, based on management at the client device management device (Saito, figure 44 "Internet I/F 2205 and "1394 I/F 2202", figure 47);

Saito further discloses

a model identification section for determining if the client device is of a predetermined model or if the relay device is of a predetermined model (Saito, figure 8 "1394/IP Service Location Processing Function 226" and column 20 lines 25-28 "recognizes what terminal/service exists", column 21 lines 5-10 "by reading out the configuration ROM" and lines 21-33 "vendor ID" and "what services are provided by this terminal", figure 18 "service request" and "attribute request"); and

a command conversion section for converting a command to be sent to the client device to a command in a predetermined format for controlling the client device, if the model identification section determines that the client device or the relay device is of the predetermined model (Saito, figure 8 "1394/IP Command Conversion Function 229", column 27 lines 7-15 imply 1394 type of devices and lines 47-51 imply commands for the 1394 type of devices).

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6. **Regarding claim 11**, Saito discloses the server of Claim 8, and further discloses that the 1394/IP service location processing function 226 includes registration function for the terminals connected to the PC which will not recognize a device if the registration fails (Saito, column 20 lines 25-33).

7. **Regarding claim 12**, Saito discloses a server used on an Internet connection system which comprises

a client device (Saito, figure 7 “PC 206”, “Digital TV 207”, “1st AV Connection Device 204”),

a relay device installed in said client device (Saito, figure 7 “first AV Connection Device 204”, column 31 lines 32-45 “functions to be carried out by the AV connection device...may be provided in the PC 206”),

and the server, the server being connected to Internet and also to the client device through the Internet and the relay device (Saito, figure 7 “2nd AV Connection Device 205” and “Public Network 202”, figure 43 shows only one AV Connection Device, column 42 lines 16-21, column 20 lines 34-39), comprising:

a tunneling establishing section for establishing a tunneling connection between to the relay device and the server (Saito, figure 44, “IP Processing Unit 2202, column 42 lines 45-48 and 56-61);

a client device management device for managing the client device in association with the relay device or the tunneling connection (Saito, figure 44 “NAT Processing Unit 2206”, column 42 lines 62-67);

a routing device for routing a connection, the connection from the Internet to the client device, through the tunneling connection to the relay device which is connected to the client device, based on management at the client device management device (Saito, figure 44 “Internet I/F 2205 and “1394 I/F 2202”, figure 47);

wherein the client device includes peripheral equipment, which is communicable with the relay device but cannot independently connect to the Internet (Saito, figure 7 “DVD Player 208”, “Digital VTR 209”, “Air Conditioner 213” and “Microwave Oven 214”, non-IP terminals thus imply cannot independently connect to Internet),
said server further comprising:

a command conversion section for converting a command to be sent to said peripheral equipment to a command in a predetermined format for controlling said peripheral equipment (Saito, figure 8 “1394/IP Command Conversion Function 229”, figure 26 “CCCP/LON Command Conversion Function 272”).

8. **Regarding claim 15**, Saito discloses a server used on an Internet connection system which comprises

a client device (Saito, figure 7 “PC 206”, “Digital TV 207”, “1st AV Connection Device 204”),

a relay device installed in said client device (Saito, figure 7 “first AV Connection Device 204”, column 31 lines 32-45 “functions to be carried out by the AV connection device...may be provided in the PC 206”),

and the server, the server being connected to Internet and also to the client device through the Internet and the relay device (Saito, figure 7 “2nd AV Connection Device 205” and “Public Network 202”, figure 43 shows only one AV Connection Device, column 42 lines 16-21, column 20 lines 34-39), comprising:

a tunneling establishing section for establishing a tunneling connection between to the relay device and the server (Saito, figure 44, “IP Processing Unit 2202, column 42 lines 45-48 and 56-61);

a client device management device for managing the client device in association with the relay device or the tunneling connection (Saito, figure 44 “NAT Processing Unit 2206”, column 42 lines 62-67);

a routing device for routing a connection, the connection from the Internet to the client device, through the tunneling connection to the relay device which is connected to the client device, based on management at the client device management device (Saito, figure 44 “Internet I/F 2205 and “1394 I/F 2202”, figure 47); and

a state information obtaining section for obtaining at least one of an operation state, a usage state and location information of the client device and/or the relay device (Saito, figures 18-19, column 27 lines 20-36 “to obtain location information and the attribute information”).

Claim Rejections – 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 6,523,696) in view of Tsuchiya et al. (US 6,118,784).

11. **Regarding claim 7**, Saito discloses the network-enabled home appliance of Claim 6, but does not explicitly disclose of any use of an intermediate server that provides the global address of the server located on the Internet to the accessing appliance.

On the contrary, Tsuchiya discloses a storage containing DNS server's address, DNS server which acts as an intermediate server that provides a global address that can be used to access the desired server located on the Internet (Tsuchiya, figure 1 "DNS Substituting Means 13" and column 5 lines 60-65, figure 1 "Ipv4 Address Capturing Means 14").

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have used a DNS server to obtain the actual IP address of the destination device as taught by Tsuchiya in order to efficiently update any destination IP address for any device in the network as it was commonly known in the art.

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12. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (US 6,523,696) in view of Sekiguchi (US 6,957,257).

13. **Regarding claim 13**, Saito discloses a server used on an Internet connection system which comprises

a client device (Saito, figure 7 “PC 206”, “Digital TV 207”, “1st AV Connection Device 204”),

a relay device installed in said client device (Saito, figure 7 “first AV Connection Device 204”, column 31 lines 32-45 “functions to be carried out by the AV connection device...may be provided in the PC 206”),

and the server, the server being connected to Internet and also to the client device through the relay device and the Internet (Saito, figure 7 “2nd AV Connection Device 205” and “Public Network 202”, figure 43 shows only one AV Connection Device, column 42 lines 16-21, column 20 lines 34-39), comprising:

a tunneling establishing section for establishing a tunneling connection between to the relay device and the server (Saito, figure 44, “IP Processing Unit 2202, column 42 lines 45-48 and 56-61);

a client device management device for managing the client device in association with the relay device or the tunneling connection (Saito, figure 44 “NAT Processing Unit 2206”, column 42 lines 62-67);

a routing device for routing a connection, the connection from the Internet to the client device, through the tunneling connection to the relay device which is connected to the client device, based on management at the client device

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management device (Saito, figure 44 “Internet I/F 2205 and “1394 I/F 2202”, figure 47).

Saito may not explicitly teach a section for determining if a network type is a predetermined type. However, Sekiguchi discloses a processing section that observes the IP address, thus determines if the incoming packet comes from Ipv4 network (Sekiguchi, figure 2 “IP Address Processing Section 23” and column 3 lines 54-55).

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have incorporated Sekiguchi’s function of determining the network type of incoming packets in order to be able to adapt to the Ipv6 network that may be used as one of Saito’s home network and still accurately forward information between different types of network.

14. **Regarding claim 14**, Saito and Sekiguchi disclose the server of Claim 13, further comprising:

a communication session disconnection section for disconnecting communication sessions or limiting packet transmissions if a first network environment connected to the client device or the relay device is determined not of the predetermined type (Sekiguchi, figure 2 “IP Address Processing Section 23” and figure 5 “St54” and “St55”).

It would have been obvious to the person having ordinary skill in the art, at the time the invention was made, to have included Sekiguchi’s function in Saito’s IP processing function unit in order to prevent error caused by communication between unidentifiable types of networks.

REMARKS

Applicant has presented amendments to the claims.

The Applicant Argues:

That the relied on reference requires two AV connection devices and does not teach wherein the AV connection device is installed within an individual PC or digital TV.

In response, the examiner respectfully submits:

The examiner maintains the rejection. The relied on Saito reference teaches that the AV connection functions maybe provided in the PC itself (Saito, column 31 lines 32-37). Thus, Saito does teach that the individual service providing device may have an AV connection device installed within. Furthermore, the tunneling connection established between the AV connection devices maybe established between individual service providing device and the AV connection device as well.

That the reference relied upon does not disclose that the determination is made to determine if the device is of a predetermined model.

In response, the examiner respectfully submits:

The interpretation of Saito is that a predetermined model is each 1394 type terminal which has corresponding supported set of commands for each type. Furthermore, the 1394 configuration ROM does specifies a Vendor ID for each device.

The specification of the application under examination does not provide explanation to what “model” might be. The examiner encourages applicant to detail a predetermined model and the limitation on a predetermined model to expedite prosecution.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Humpleman et al. discloses home network appliances controlling through web browser.
- b. Sawada discloses an apparatus for controlling devices in the home network through WWW server.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUPAPORN NILANONT whose telephone number is

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(571) 270-5655. The examiner can normally be reached on Monday through Thursday and alternate Friday at 8:30 AM - 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. N./

Examiner, Art Unit 2446
6-2-2009

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2446